

M1A1 Firepower Enhancement Program



Description

The Firepower Enhancement Program (FEP) is a suite of upgrades for the Marine Corps' M1A1 main battle tank. It will include, at a minimum, a second-generation thermal sight and a far-target location (FTL) capability. The advanced thermal sight consists of infrared optics, an infrared focal plane array, associated analog and digital electronics, display, brackets, and cables. The FTL system consists of a North Finding Module (NFM), bracket, cables, and inputs from the existing laser rangefinder and Precision Lightweight Global Positioning System Receiver (PLGR). The FTL system is a new capability for the Marine Corps M1A1 tank and will provide the tank crew with accurate target location (less than 50 meters Circular Error Probability (CEP) out to 8,000 meters) within two seconds after lasing the target. The FTL solution is determined by utilizing the inputs of the laser rangefinder, PLGR, and NFM.

Operational Impact

As part of a Marine Air-Ground Task Force (MAGTF), the M1A1 provides maneuver and armor-protected firepower to the Ground Combat Element. As the mobility and survivability of threat systems improve, the M1A1 must increase the speed and accuracy with which it acquires and engages targets. The M1A1 FEP will provide thermal imaging and FTL capability that will overmatch threat sensor performance, thereby improving the ability of Marine Corps tank crews to engage and defeat an enemy at extended ranges. The M1A1 FEP will provide for increased target detection, recognition, identification, and FTL capabilities during day and night operations, through smoke, fog, or other battlefield obscurants.

Program Status

The Commanding General, Marine Corps Systems Command, approved the program for entry into Milestone C.

Procurement Profile: FY 05 FY 06

Quantity: 4 148

Developer/Manufacturer:
Raytheon Company, McKinney, Texas